

Communication Flow Key

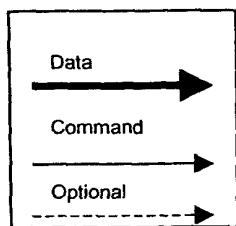


Figure 1: System Architecture

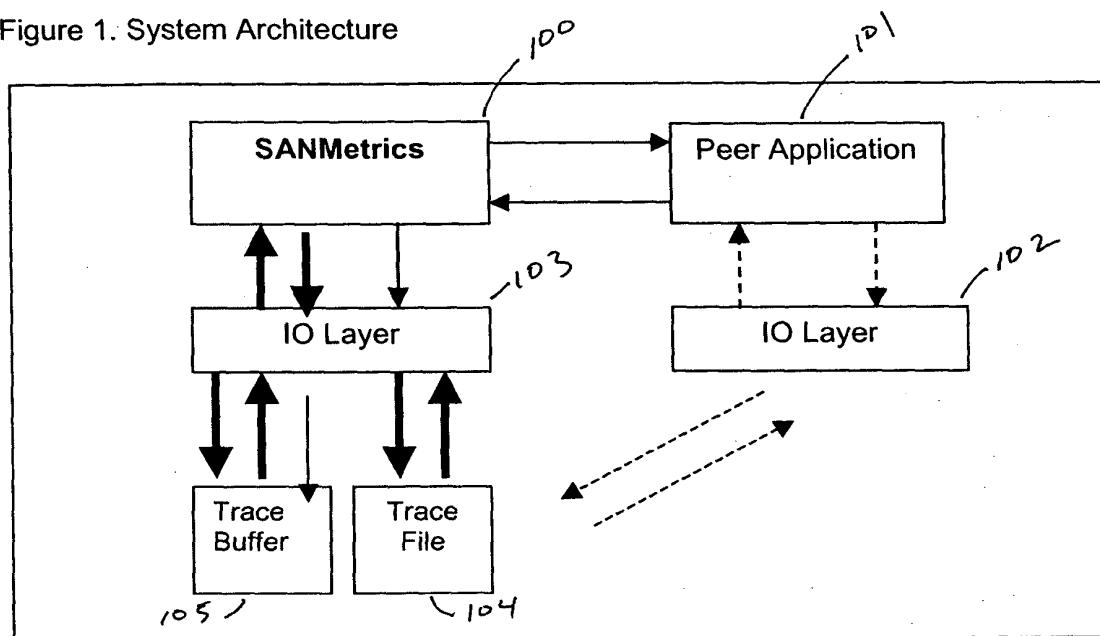


FIGURE 1

Figure 2. SANMetrics Architecture

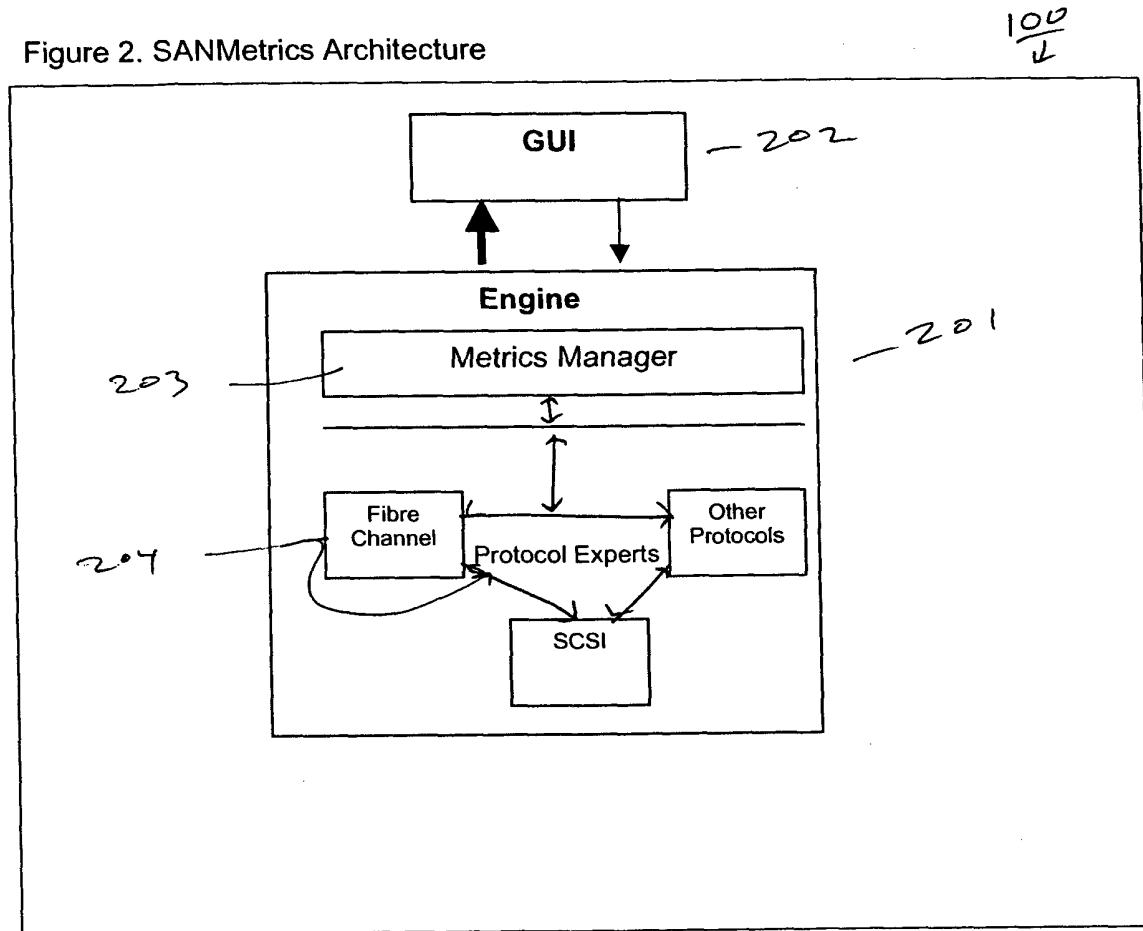


FIGURE 2

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Figure 3

30

RTX-5 Analytics - 2D Precomp																																																																																																																																																																																																																																					
Analyzer - Channel 1-A (1 Gb, GT-A, File Channel)																																																																																																																																																																																																																																					
<input checked="" type="checkbox"/>	Analyzer - Channel 1-A (1 Gb, GT-A, File Channel)	<input checked="" type="checkbox"/>	Analyzer - Channel 1-B (1 Gb, GT-A, File Channel)	<input checked="" type="checkbox"/>	Target bc : LUN 00	<input checked="" type="checkbox"/>	Target dc : LUN 00	<input checked="" type="checkbox"/>	Target fc : LUN 00																																																																																																																																																																																																																												
<p>301</p> <p>302</p> <p>303</p> <p>304</p> <p>305</p> <p>306</p> <p>307</p>																																																																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>Description</th> <th>Time</th> <th>Event</th> <th>Service</th> <th>Description</th> <th>Port</th> <th>Time</th> <th>Total Count</th> <th>Severity</th> <th>Value Description</th> </tr> </thead> <tbody> <tr> <td>3.5 Abandon Loss exceeds threshold</td> <td>00:00:00.000</td> <td>78_513</td> <td>N/A</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>1</td> <td>1</td> <td>% of Abn Lost</td> </tr> <tr> <td>3.5 Abandon Loss by device</td> <td>00:00:00.018</td> <td>222_250</td> <td>N/A</td> <td>ef</td> <td>0.1</td> <td>FC2</td> <td>377</td> <td>5</td> <td>Warning</td> </tr> <tr> <td>3.5 AB FL white loop in closed state</td> <td>00:00:00.022</td> <td>089_425</td> <td>bc</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>15</td> <td>4</td> <td>Warning</td> </tr> <tr> <td>3.5 Abandon Loss in closed state</td> <td>00:00:00.022</td> <td>089_425</td> <td>bc</td> <td>ef</td> <td>0.1</td> <td>FC2</td> <td>377</td> <td>5</td> <td>Warning</td> </tr> <tr> <td>3.5 Abandon Loss by device</td> <td>00:00:00.023</td> <td>683_338</td> <td>bc</td> <td>ef</td> <td>0.1</td> <td>FC2</td> <td>377</td> <td>5</td> <td>Warning</td> </tr> <tr> <td>3.5 Abandon Loss by device</td> <td>00:00:00.027</td> <td>089_138</td> <td>bc</td> <td>ef</td> <td>0.1</td> <td>FC2</td> <td>377</td> <td>5</td> <td>Warning</td> </tr> <tr> <td>3.5 Abandon Loss by device</td> <td>00:00:00.032</td> <td>108_350</td> <td>bc</td> <td>ef</td> <td>0.1</td> <td>FC2</td> <td>377</td> <td>5</td> <td>Warning</td> </tr> <tr> <td>3.5 Out of Credit during Terency</td> <td>00:00:00.067</td> <td>282_350</td> <td>01</td> <td>bc</td> <td>0.1</td> <td>FC2</td> <td>10</td> <td>1</td> <td>Warning</td> </tr> <tr> <td>3.5 AB FL white loop in closed state</td> <td>00:00:00.085</td> <td>840_989</td> <td>N/A</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>15</td> <td>4</td> <td>Warning</td> </tr> <tr> <td>3.5 AB FL white loop in closed state</td> <td>00:00:00.246</td> <td>908_053</td> <td>N/A</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>15</td> <td>4</td> <td>Warning</td> </tr> <tr> <td>3.5 AB FL white loop in closed state</td> <td>00:00:00.282</td> <td>214_350</td> <td>N/A</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>15</td> <td>4</td> <td>Warning</td> </tr> <tr> <td>3.5 AB FL white loop in closed state</td> <td>00:00:00.367</td> <td>597_675</td> <td>N/A</td> <td>N/A</td> <td>0.1</td> <td>FC2</td> <td>15</td> <td>4</td> <td>Warning</td> </tr> <tr> <td>3.5 Failed Open: Open declined while loop in Open State</td> <td>00:00:00.473</td> <td>701_2452</td> <td>bc</td> <td>bc</td> <td>0.1</td> <td>FC2</td> <td>1</td> <td>2</td> <td>Warning</td> </tr> <tr> <td>3.5 Failed Open: Open declined while loop in Open State</td> <td>00:00:00.504</td> <td>385_163</td> <td>01</td> <td>bc</td> <td>0.1</td> <td>FC2</td> <td>10</td> <td>1</td> <td>Warning</td> </tr> <tr> <td>3.5 Out of Credit during Terency</td> <td>00:00:00.601</td> <td>134_042</td> <td>bc</td> <td>bc</td> <td>0.1</td> <td>FC2</td> 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Terency</td> <td>00:00:00.257</td> <td>320_680</td> <td>01</td> <td>bc</td> <td>0.1</td> <td>FC2</td> <td>10</td> <td>1</td> <td>Warning</td> </tr> </tbody> </table> <p>308</p>										Description	Time	Event	Service	Description	Port	Time	Total Count	Severity	Value Description	3.5 Abandon Loss exceeds threshold	00:00:00.000	78_513	N/A	N/A	0.1	FC2	1	1	% of Abn Lost	3.5 Abandon Loss by device	00:00:00.018	222_250	N/A	ef	0.1	FC2	377	5	Warning	3.5 AB FL white loop in closed state	00:00:00.022	089_425	bc	N/A	0.1	FC2	15	4	Warning	3.5 Abandon Loss in closed state	00:00:00.022	089_425	bc	ef	0.1	FC2	377	5	Warning	3.5 Abandon Loss by device	00:00:00.023	683_338	bc	ef	0.1	FC2	377	5	Warning	3.5 Abandon Loss by device	00:00:00.027	089_138	bc	ef	0.1	FC2	377	5	Warning	3.5 Abandon Loss by device	00:00:00.032	108_350	bc	ef	0.1	FC2	377	5	Warning	3.5 Out of Credit during Terency	00:00:00.067	282_350	01	bc	0.1	FC2	10	1	Warning	3.5 AB FL white loop in closed state	00:00:00.085	840_989	N/A	N/A	0.1	FC2	15	4	Warning	3.5 AB FL white loop in closed state	00:00:00.246	908_053	N/A	N/A	0.1	FC2	15	4	Warning	3.5 AB FL white loop in closed state	00:00:00.282	214_350	N/A	N/A	0.1	FC2	15	4	Warning	3.5 AB FL white loop in closed state	00:00:00.367	597_675	N/A	N/A	0.1	FC2	15	4	Warning	3.5 Failed Open: Open declined while loop in Open State	00:00:00.473	701_2452	bc	bc	0.1	FC2	1	2	Warning	3.5 Failed Open: Open declined while loop in Open State	00:00:00.504	385_163	01	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.601	134_042	bc	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.601	134_122	bc	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.671	671_686	01	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.671	350_700	01	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.725	725_288	01	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.725	725_684	01	bc	0.1	FC2	10	1	Warning	3.5 Out of Credit during Terency	00:00:00.257	320_680	01	bc	0.1	FC2	10	1	Warning
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3.5 Out of Credit during Terency	00:00:00.725	725_288	01	bc	0.1	FC2	10	1	Warning																																																																																																																																																																																																																												
3.5 Out of Credit during Terency	00:00:00.725	725_684	01	bc	0.1	FC2	10	1	Warning																																																																																																																																																																																																																												
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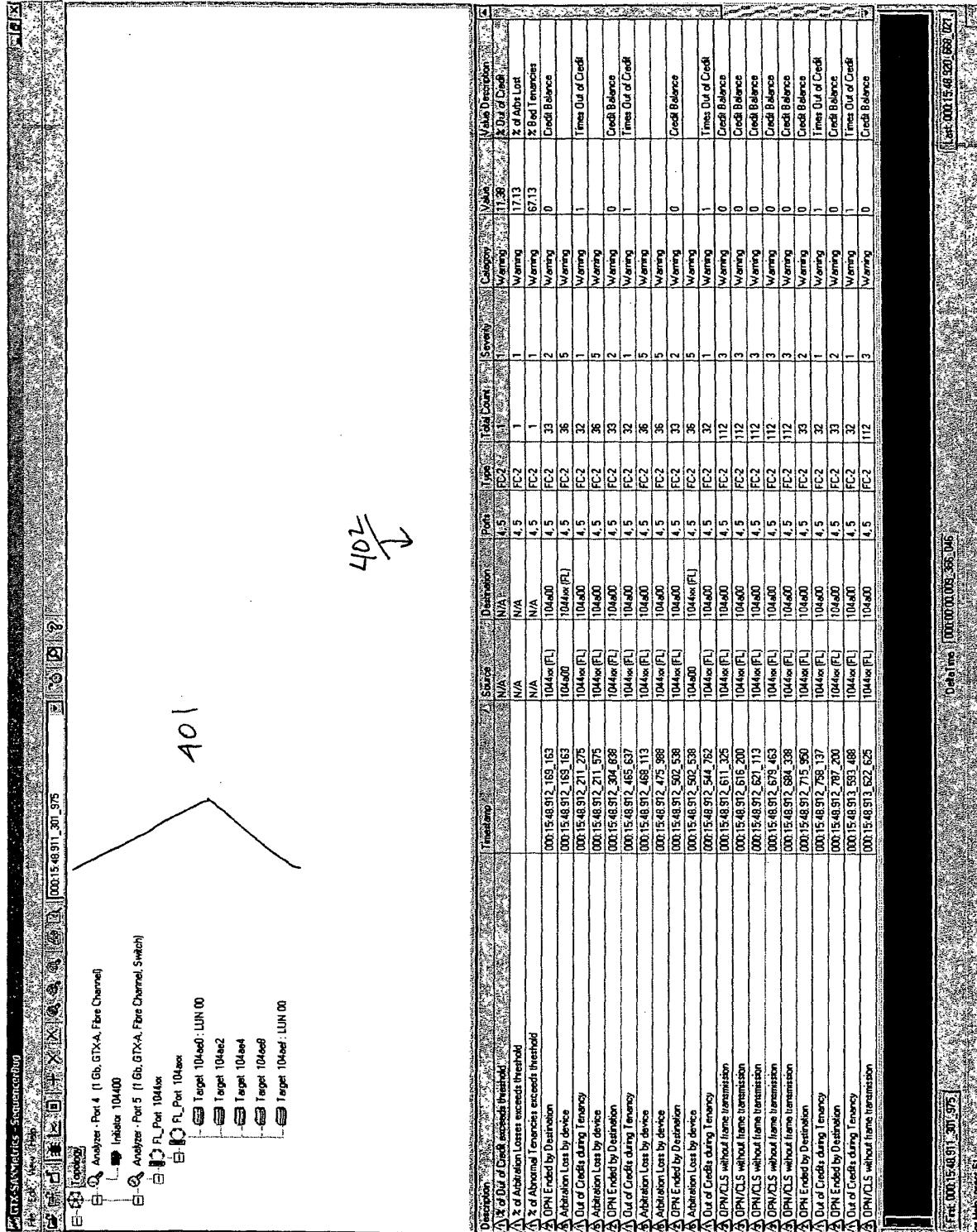
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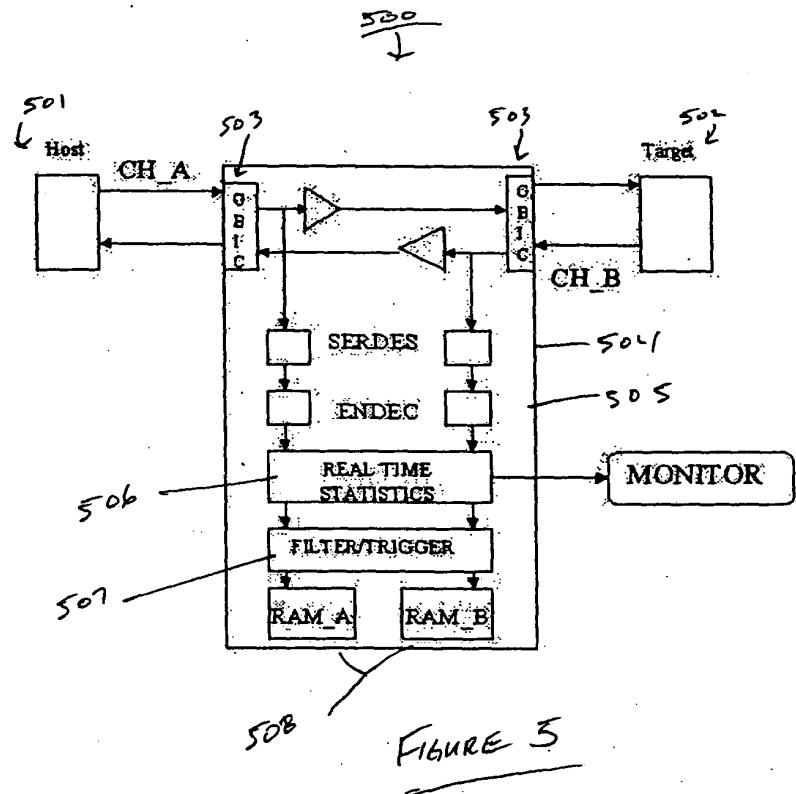
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Figure 4

400





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U.S. SERIAL NO.: UNKNOWN
FILED: HEREWITH
APPLICANT: FINISAR CORPORATION
TITLE: NETWORK ANALYSIS OMNISCIENT LOOP STATE MACHINE
INVENTOR: KLOTZ, ET AL.
EXPRESS MAIL NO.: EV335470572US
CONF. NO.: UNKNOWN
PAGE 6 OF 12

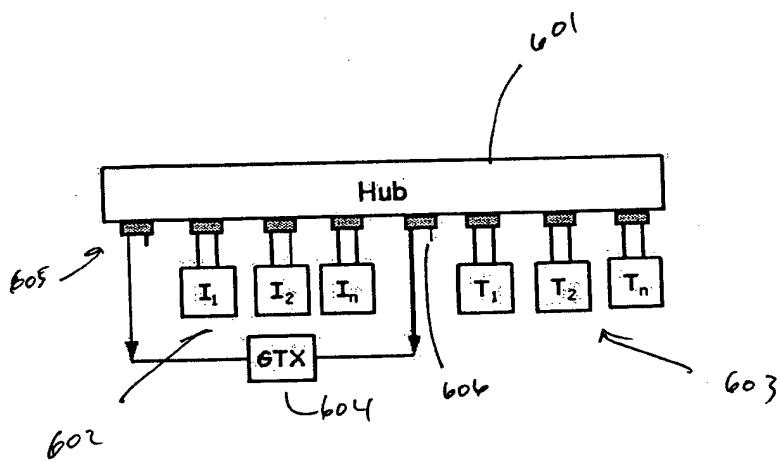


Figure 6

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APPLICANT: FINISAR CORPORATION
TITLE: NETWORK ANALYSIS OMNISCIENT LOOP STATE MACHINE
INVENTOR: KLOTZ, ET AL.
EXPRESS MAIL NO.: EV335470572US PAGE 7 OF 12

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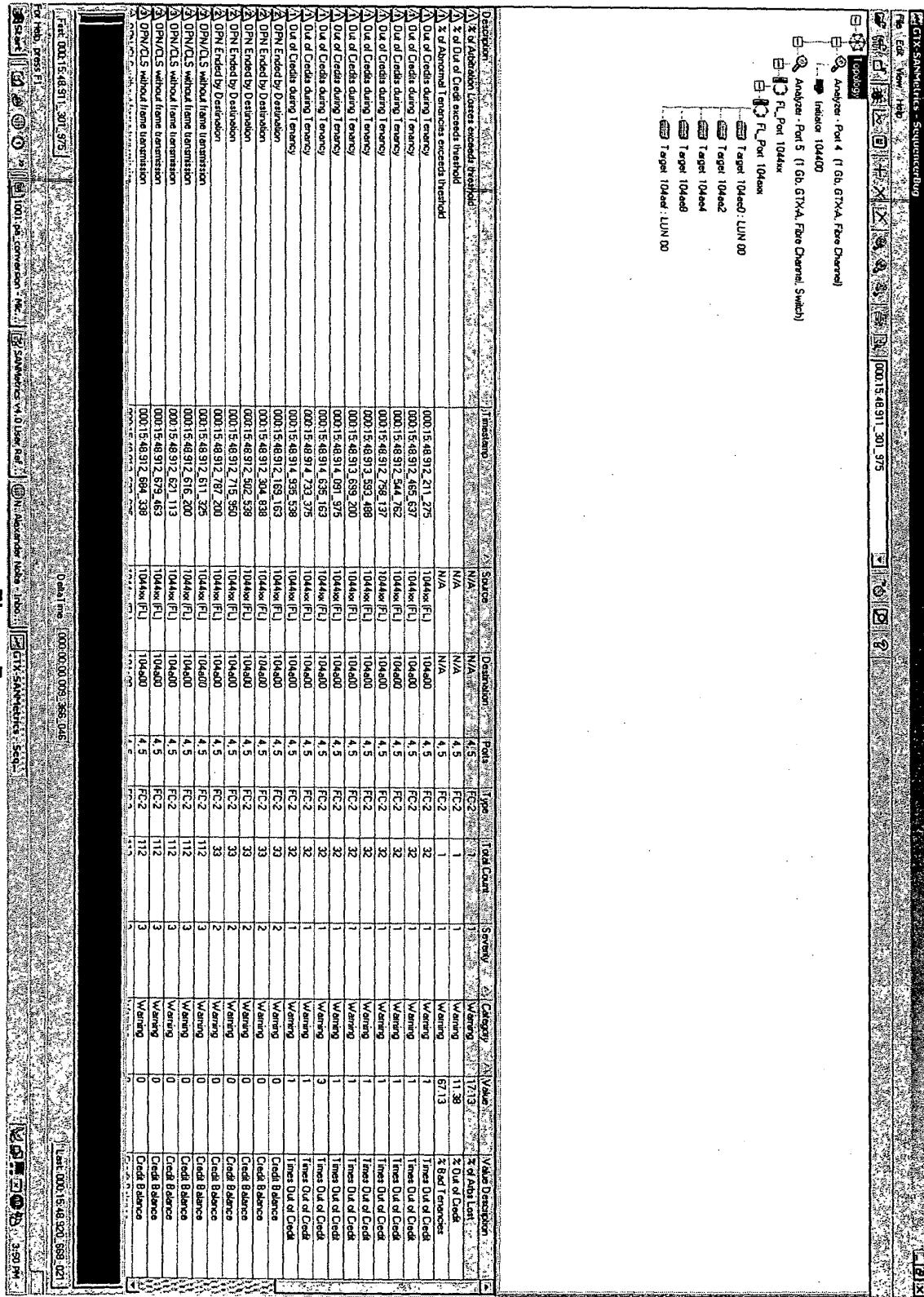


Figure 7

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Fibre Channel - Zone Configuration												
Description		Source		Destination		Port		Link Layer		Severity		
Description		Source		Destination		Port		Link Layer		Category	Value	Variable Description
Out of Credits during Tenancy	Device	00:00:00:01:67-20:990	01	bc	01	FC2	10	1	FC2	Warning	5	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:504-356:153	01	bc	01	FC2	10	1	FC2	Warning	5	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:504-500:338	01	bc	01	FC2	10	1	FC2	Warning	2	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:34-342:553	01	bc	01	FC2	10	1	FC2	Warning	4	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:134-172:863	01	bc	01	FC2	10	1	FC2	Warning	1	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:671-197:088	01	bc	01	FC2	10	1	FC2	Warning	6	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:01:671-350:700	01	bc	01	FC2	10	1	FC2	Warning	1	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:02:229:595:298	01	bc	01	FC2	10	1	FC2	Warning	5	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:02:228:604:625	01	bc	01	FC2	10	1	FC2	Warning	1	Time Out of Credit
Out of Credits during Tenancy	Device	00:00:00:03:257:920:838	01	bc	01	FC2	10	1	FC2	Warning	4	Time Out of Credit
Reed Open - Open detected while loop in Open State	Device	00:00:00:04:773:707:462	bc	bc	01	FC2	1	2	FC2	Warning		
ARB 70 while loop in closed state	Device	00:00:00:00:018:227:290	01	bc	01	FC2	15	4	FC2	Warning		
ARB 70 while loop in closed state	Device	00:00:00:00:065:840:988	01	bc	01	FC2	15	4	FC2	Warning		
ARB 70 while loop in closed state	Device	00:00:00:00:282:214:350	N/A	N/A	01	FC2	15	4	FC2	Warning		
ARB 70 while loop in closed state	Device	00:00:00:00:367:593:875	N/A	N/A	01	FC2	15	4	FC2	Warning		
Abnormal Loss by device	Device	00:00:00:00:001:786:513	bc	ad	01	FC2	377	5	FC2	Warning		
Abnormal Loss by device	Device	00:00:00:00:022:068:425	bc	ad	01	FC2	377	5	FC2	Warning		
Abnormal Loss by device	Device	00:00:00:00:023:888:538	bc	ad	01	FC2	377	5	FC2	Warning		
Abnormal Loss by device	Device	00:00:00:00:027:952:130	bc	ad	01	FC2	377	5	FC2	Warning		
Abnormal Loss by device	Device	00:00:00:00:032:108:590	bc	ad	01	FC2	377	5	FC2	Warning		

Figure 8

ATTY DKT. NO.: FNSR/1001.04
U.S. SERIAL NO.: UNKNOWN CONF. NO.: UNKNOWN
FILED: HEREWITH
APPLICANT: FINISAR CORPORATION
TITLE: NETWORK ANALYSIS OMNISCIENT LOOP STATE MACHINE
INVENTOR: KLOTZ, ET AL.
EXPRESS MAIL NO.: EV335470572US PAGE 9 OF 12

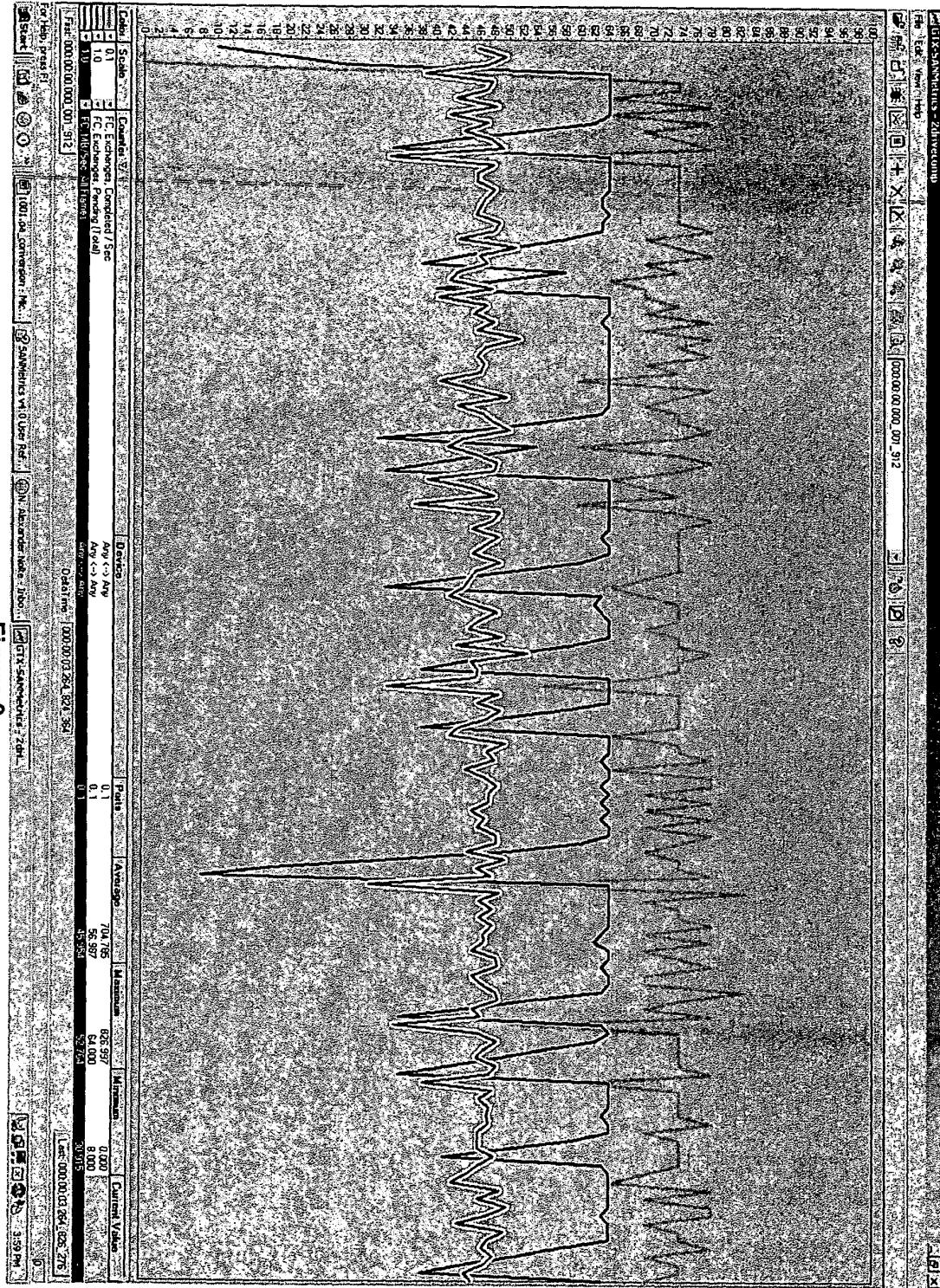


Figure 9

ATTY DKT. NO.: FNSR/1001.04
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APPLICANT: FINISAR CORPORATION
TITLE: NETWORK ANALYSIS OMNISCIENT LOOP STATE MACHINE
INVENTOR: KLOTZ, ET AL.
EXPRESS MAIL NO.: EV335470572US
CONF. NO.: UNKNOWN
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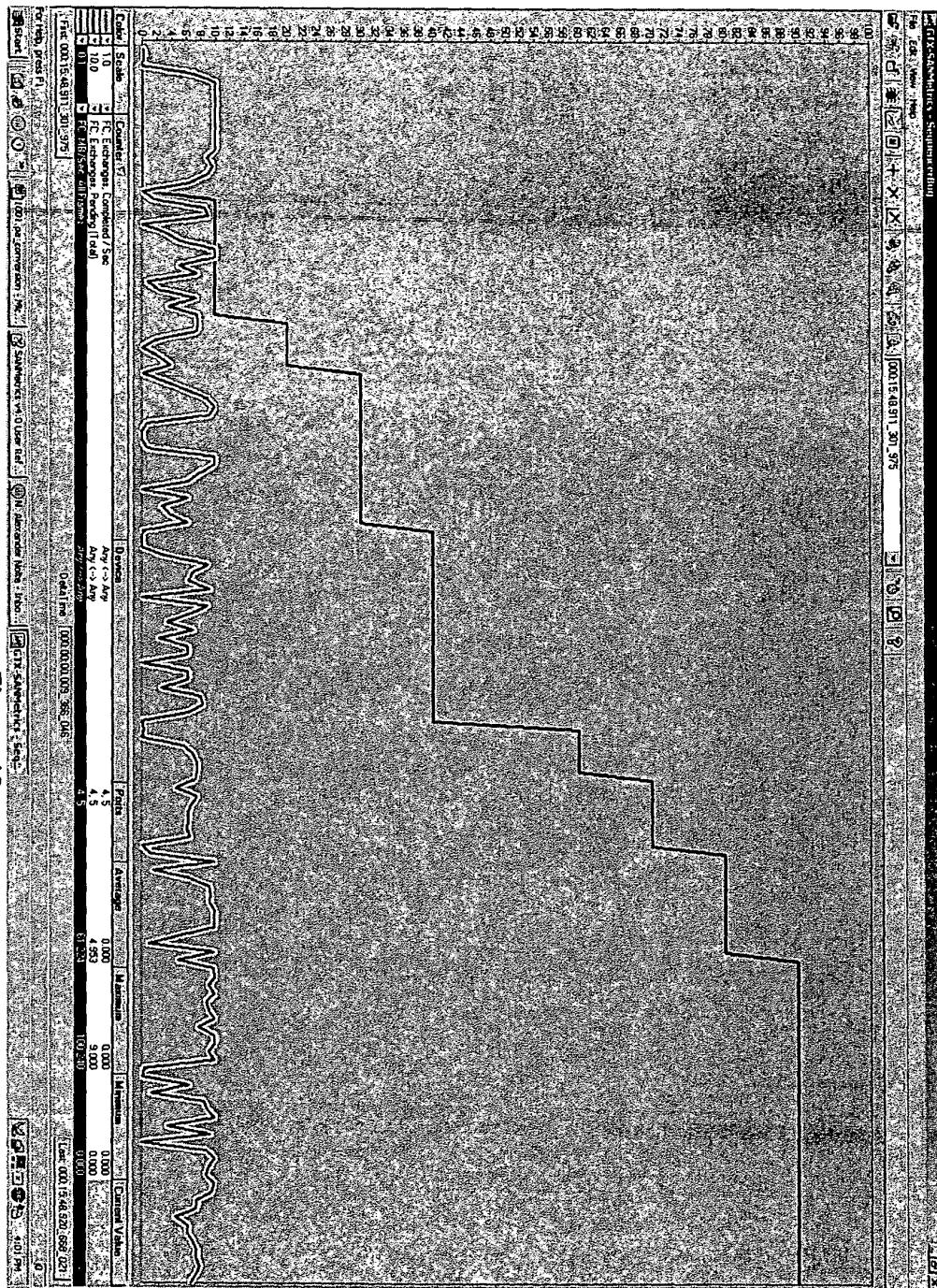


Figure 10

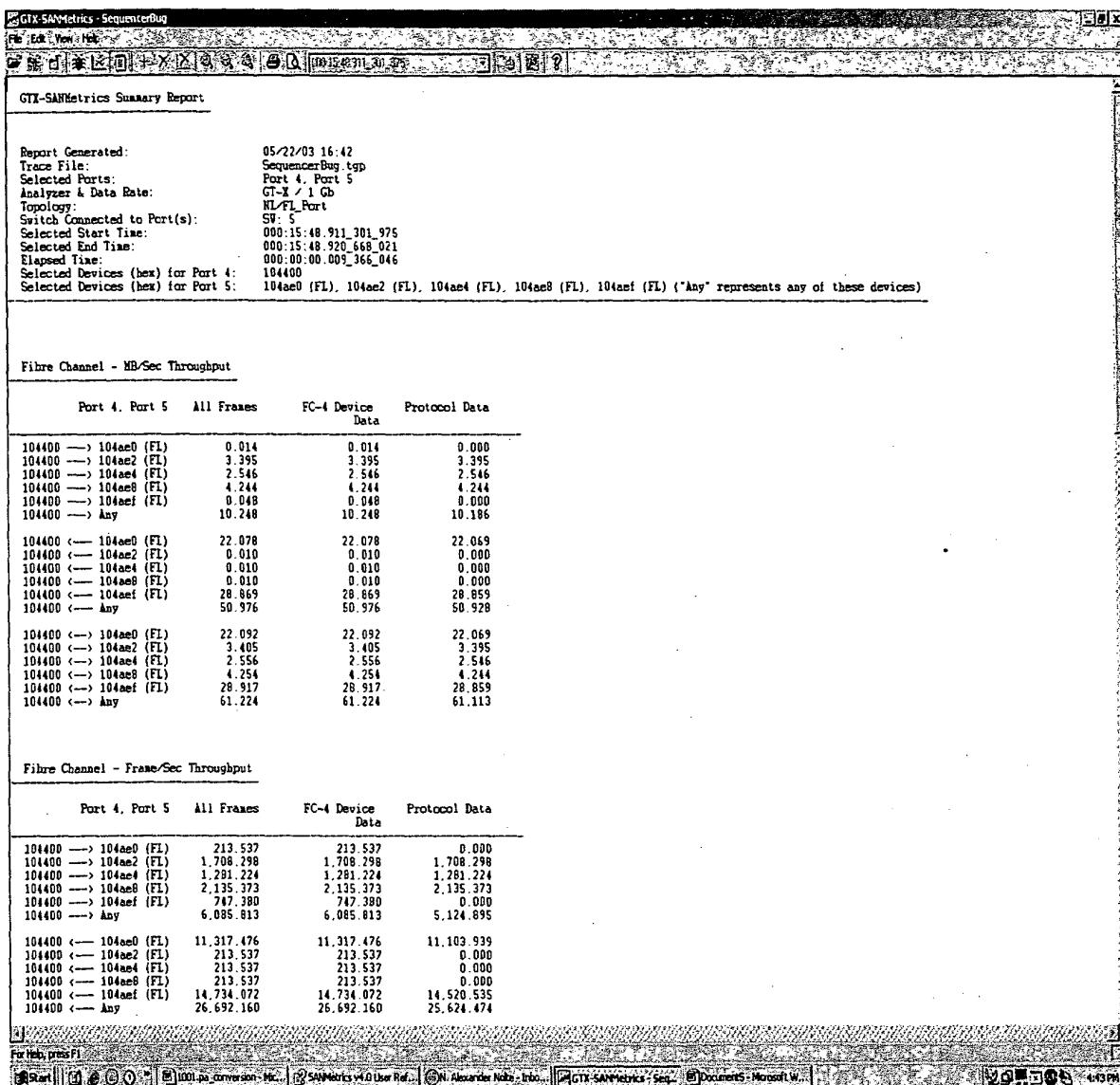


Figure 11

ATTY DKT. NO.: FNSR/1001.04
U.S. SERIAL NO.: UNKNOWN CONF. NO.: UNKNOWN
FILED: HEREWITH
APPLICANT: FINISAR CORPORATION
TITLE: NETWORK ANALYSIS OMNISCIENT LOOP STATE MACHINE
INVENTOR: KLOTZ, ET AL.
EXPRESS MAIL NO.: EV335470572US PAGE 12 OF 12

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Fibre Channel - MB/Sec Throughput			
Channel 1-A, Channel 1-B	All Frames	FC-4 Device Data	Protocol Data
1 --> bc	0.020	0.020	0.000
1 --> ef	0.027	0.027	0.000
1 --> Any	0.047	0.047	0.000
1 <-- bc	19.143	19.143	19.130
1 <-- ef	26.763	26.763	26.744
1 <-- Any	45.907	45.907	45.874
1 <--> bc	19.163	19.163	19.130
1 <--> ef	26.791	26.791	26.744
1 <--> Any	45.954	45.954	45.874

Fibre Channel - Frame/Sec Throughput			
Channel 1-A, Channel 1-B	All Frames	FC-4 Device Data	Protocol Data
1 --> bc	303.845	303.845	0.000
1 --> ef	420.237	420.237	0.000
1 --> Any	724.082	724.082	0.000
1 <-- bc	10,406.073	10,406.073	10,105.291
1 <-- ef	13,877.010	13,877.010	13,456.467
1 <-- Any	24,283.083	24,283.083	23,561.758
1 <--> bc	10,709.918	10,709.918	10,105.291
1 <--> ef	14,297.247	14,297.247	13,456.467
1 <--> Any	25,007.165	25,007.165	23,561.758

Fibre Channel - Bus Utilization			
Channel 1-A, Channel 1-B	%Tenancy Time	%Link Time	%Link Time w/ ARB
1 --> bc	0.047	0.080	0.109

FIGURE 12